

REMARKS

After entry of this amendment, claims 1-36 and 38-63 are pending. The claims have been amended without prejudice or disclaimer and finds support *inter alia* in the original claims. No new matter has been added.

In response to the restriction requirement set forth in the Office Action mailed September 1, 2009, Applicants provisionally elect Group I, claims 1-36 and 38-44, drawn to a process of producing fatty acids, without traverse. Applicants further elect $\Delta 6$ -desaturase activity and $\Delta 6$ -elongase activity for parts a) and b) of claim 1, respectively. The present amendments to claim 1 reflect the above election.

The Examiner additionally requires election of one SEQ ID NO corresponding to the enzymes that are part of the elected invention. In response, Applicants provisionally make the following election:

1. $\Delta 6$ -desaturase activity – SEQ ID NO: 193 and its corresponding amino acid sequence SEQ ID NO: 194;
2. $\Delta 6$ -elongase activity – SEQ ID NO: 27 and its corresponding amino acid sequence SEQ ID NO: 28;
3. $\Delta 5$ -desaturase activity – SEQ ID NO: 11 and its corresponding amino acid sequence SEQ ID NO: 12;
4. $\Delta 5$ -elongase activity – SEQ ID NO: 83 and its corresponding amino acid sequence SEQ ID NO: 84; and
5. $\Delta 4$ -desaturase activity – SEQ ID NO: 41 and its corresponding amino acid sequence SEQ ID NO: 42.

In the event that the above restriction to one SEQ ID NO extends to the sequences recited in dependent claims 7 and 8, Applicants hereby provisionally make the following additional election:

6. $\omega 3$ -desaturase activity (claim 7) – SEQ ID NO: 87 and its corresponding amino acid sequence SEQ ID NO: 88; and

7. Δ 12-desaturase activity (claim 8) – SEQ ID NO: 195 and its corresponding amino acid sequence SEQ ID NO: 196.

Applicants reserve all rights to pursue the non-elected subject matter in one or more divisional application.

This response is filed within the one month period for response from the mailing of the Office Communication. No fee is believed due. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 13987-00020-US from which the undersigned is authorized to draw.

Respectfully submitted,

By /s/ Hui-Ju Wu
Hui-Ju Wu, Ph.D.

Registration No.: 57,209
CONNOLLY BOVE LODGE & HUTZ LLP
1007 North Orange Street
P. O. Box 2207
Wilmington, Delaware 19899-2207
(302) 658-9141
(302) 658-5614 (Fax)
Attorney for Applicants

#715124